

95. We believe that the NANC should determine, in the first instance, whether one or multiple administrators should be selected, whether LNPA(s) can be the same entity selected to be the NANPA, how the LNPA(s) should be selected, the specific duties of the LNPA(s), and the geographic coverage of the regional databases. Once the NANC has selected the LNPA(s) and determined the locations of the regional databases, it must report its decisions to the Commission. The NANC should also determine the technical interoperability and operational standards, the user interface between telecommunications carriers and the LNPA(s), and the network interface between the SMS and the downstream databases. Finally, the NANC should develop the technical specifications for the regional databases, e.g., whether a regional database should consist of a service management system (SMS) or an SMS/SCP pair.²⁸⁸ In reaching its decisions, the NANC should consider the most cost-effective way of accomplishing number portability. We note that it will be essential for the NANPA to keep track of information regarding the porting of numbers between and among carriers. We thus believe it necessary for the NANC to set guidelines and standards by which the NANPA and LNPA(s) share numbering information so that both entities can efficiently and effectively administer the assignment of the numbering resource. For example, the NANC might require that the databases easily integrate with 911 databases.

96. We recognize that authorizing the NANC to select a LNPA(s) may have an impact on Illinois's April 1996 selection of Lockheed-Martin as the administrator of the Illinois SMS, as well as the Maryland and Colorado task forces' plans to release their RFPs for their SMS administrators in the second quarter of 1996.²⁸⁹ Therefore, in light of these and other ongoing efforts by state commissions, we conclude that any state that prefers to develop its own statewide database rather than participate in a regionally-deployed database may opt out of its designated regional database and implement a state-specific database.²⁹⁰ We direct the Chief, Common Carrier Bureau, to issue a Public Notice that identifies the administrator selected by the NANC and the proposed locations of the regional databases. A state will have 60 days from the release date of the Public Notice to notify the Common Carrier Bureau and NANC that the state does not wish to

²⁸⁸ An SMS is a database or computer system not part of the public switched network that, among other things: (1) interconnects to an SCP and sends to that SCP the information and call processing instructions needed for a network switch to process and complete a telephone call; and (2) provides telecommunications carriers with the capability of entering and storing data regarding the processing and completing of a telephone call.

An SCP is a database in the public switched network which contains information and call processing instructions needed to process and complete a telephone call. The network switches access an SCP to obtain such information. Typically, the information contained in an SCP is obtained from the SMS.

²⁸⁹ See Ameritech May 15, 1996 Ex Parte Filing at 3; MD PSC Report at app. 1 at 17; CO PUC May 9, 1996 News Release; CO PUC May 29, 1996 News Release.

²⁹⁰ See 47 U.S.C. § 251(d)(3).

participate in the regional database system for number portability. Carriers may challenge a state's decision to opt out of the regional database system by filing a petition with the Commission. Relief will be granted if the petitioner can demonstrate that the state decision to opt out would significantly delay deployment of permanent number portability or result in excessive costs to carriers. We note that state databases would have to meet the national requirements and operational standards recommended by the NANC and adopted by this Commission. In addition, such state databases must be technically compatible with the regional system of databases and must not interfere with the scheduled implementation of the regional databases.

97. We further note that any administrator selected by a state prior to the release of this Order that wishes to bid for administration of one of the regional databases must submit a new proposal in accordance with the guidelines established by the NANC. We emphasize that nothing in this section affects any other action that the Commission may take regarding the delegation and transfer of functions related to number administration. We delegate authority to the Chief, Common Carrier Bureau, to monitor the progress of the NANC in selecting the LNPA(s) and in developing and implementing the database architecture described above.

98. We believe that telecommunications carriers should have open access to all regional databases. Just as we conclude all carriers must have equal access to any long-term number portability method, and that no portion of a long-term number portability method should be proprietary to any carrier, we further conclude that all carriers must have equal and open access to all regionally-deployed databases containing number portability-specific data. Allowing particular carriers access to the databases over others would be inherently discriminatory and anti-competitive. All carriers providing number portability need to have access to all relevant information to be able to provide customers with this important capability. We thus conclude that the 1996 Act, in addition to general rules of equity and competitive neutrality, requires equal and open access to all regionally-deployed databases for all carriers wishing to interconnect.

99. We believe that, at this time, the information contained in the number portability regional databases should be limited to the information necessary to route telephone calls to the appropriate service providers. The NANC should determine the specific information necessary to provide number portability. To include, for example, the information necessary to provide E911 services or proprietary customer-specific information would complicate the functions of the number portability databases and impose requirements that may have varied impacts on different localities.²⁹¹ For instance, because different localities have adopted different emergency response systems, the regional databases would have to be configured in such a fashion as to provision the appropriate emergency information to each locality's particular system. Similarly, special

²⁹¹ Marion County Comments at 1-2; NENA Reply Comments at 1-3; US West Comments at 18.

systems would need to be developed to restrict access to proprietary customer-specific information. In either instance, the necessary programming to add such capabilities to the regional databases would complicate the functionality of those databases.

100. Because we require open access to the regional databases, it would be inequitable to require carriers to disseminate, by means of those databases, proprietary or customer-specific information. We therefore contemplate that the regional deployment of databases will permit individual carriers to own and operate their own downstream databases. These carrier-specific databases will allow individual carriers to provide number portability in conjunction with other functions and services. To the extent that individual carriers wish to mix information, proprietary or otherwise, necessary to provide other services or functions with the number portability data, they are free to do so at their downstream databases. We reiterate, however, that a carrier may not withhold any information necessary to provide number portability on the grounds that such data are combined with other information in its downstream database; it must furnish all information necessary to provide number portability to the regional databases as well as to its own downstream database.

101. Carriers that choose not to access directly the regional databases or deploy their own downstream databases can seek access to the carrier-specific databases deployed by other carriers. The provision of access to network elements and facilities of incumbent LECs is addressed in our proceeding implementing section 251 of the Communications Act.²⁹² We believe the issue of access to incumbent LECs' carrier-specific databases by other carriers for purposes of number portability is best addressed in that proceeding. Parties may negotiate third-party access to non-incumbent LECs' carrier-specific databases on an individual basis.

102. In the Numbering Plan Order, we concluded that the Commission should invoke its statutory authority to recover its costs for regulating numbering activities, including costs incurred from the establishment, oversight of, and participation in the NANC.²⁹³ The Commission is required to institute a rulemaking proceeding annually to adjust the schedule of regulatory fees to reflect its performance of activities relating to enforcement, policy and rulemaking, user information services, and international activities, pursuant to the relevant appropriations legislation.²⁹⁴ Therefore, we intend to include the additional costs incurred by the Commission related to NANC and regulating number portability in the fiscal 1997 adjustment of the schedule of regulatory fees. In that proceeding, we will assess the nature and amount of the additional burdens imposed

²⁹² Interconnection NPRM at ¶¶ 107-16; see generally id. at II.B.2.c.

²⁹³ 47 U.S.C. § 152; Numbering Plan Order, 11 FCC Red at 2623.

²⁹⁴ 47 U.S.C. § 159(b)(2).

by the activities authorized here, and all interested parties will be afforded an opportunity to comment.

F. Currently Available Number Portability Measures

1. Background

103. In the Notice, we discussed certain currently available number portability measures that LECs can use to provide service provider number portability. We focused on RCF and DID and acknowledged that the use of either method for number portability has significant limitations.²⁹⁵ We sought comment on the costs of implementing these measures, and on their limitations and disadvantages.²⁹⁶ We also requested that parties discuss whether these currently available measures can be improved so that they are workable, long-term solutions, and if so, at what cost.²⁹⁷ Finally, we sought comment on how the costs of providing service provider portability using RCF and DID should be recovered.²⁹⁸

2. Implementation of Currently Available Number Portability Measures

a. Positions of the Parties

104. Commenting parties, with the exception of several of the incumbent LECs, generally agree that the technical limitations described in the Notice render the interim measures unacceptable in the long term.²⁹⁹ Indeed, many parties point out additional

²⁹⁵ Notice, 10 FCC Rcd at 12369-70. The limitations of RCF described in the Notice include: (1) significant strain on number plan administration and contribution to area code exhaustion; (2) failure to support several custom local area signalling services and other vertical features, and possible degradation of transmission quality; (3) limits on the number of calls to customers of the same competing service provider that can be handled at any one time; (4) preclusion of efficient routing of calls by competing networks since the incumbent LEC is always involved in the routing of calls even to a customer who has chosen to change to another provider; and (5) recovery of interstate access charges from IXC's by the LEC instead of the competing local service provider. Id. at 12369. DID has many of the same limitations as RCF, such as the inability to support certain CLASS features, the possible degradation of transmission quality, and limits on how many calls can be processed at any one time. Id. at 12369-70.

²⁹⁶ Id. at 12370.

²⁹⁷ Id.

²⁹⁸ Id. at 12371.

²⁹⁹ See, e.g., Cablevision Lightpath Reply Comments at 8-10; Competitive Carriers Comments at 18-19; General Communications Comments at 4. Cf. Bell Atlantic Comments at 5-7; NYNEX Comments at 7, 9.

disadvantages of RCF and DID, such as: longer call set-up times, incumbent access to competitors' proprietary information, complicated resolution of customer complaints, increased potential for call blocking, and substantial costs to new entrants.³⁰⁰ Bell Atlantic counters that calls forwarded by RCF in its network can support CLASS features if the co-carrier has modern digital switching equipment and common channel signalling, and it adds that there is no limit on the number of calls RCF can handle simultaneously.³⁰¹

105. Many of the new entrants, nevertheless, urge the Commission to require incumbent LECs to provide interim measures until a long-term solution is implemented.³⁰² These carriers generally caution that use of interim solutions should not delay implementation of a permanent solution.³⁰³ While acknowledging that RCF and DID are already technically feasible and generally available, several LECs argue that the Commission need not take action on interim measures.³⁰⁴ They generally focus, instead, on phasing in a long-term solution.³⁰⁵

106. AT&T and MCI initially argued for using a medium-term database solution, namely, the Carrier Portability Code (CPC) method,³⁰⁶ because of its advantages over RCF or DID,³⁰⁷ but subsequently favored implementing LRN as soon as possible.³⁰⁸

³⁰⁰ See, e.g., Cablevision Lightpath Reply Comments at 10; Teleport Comments at 7; MCI Comments at 22.

³⁰¹ Bell Atlantic Comments at 5-7.

³⁰² See, e.g., NCTA Comments at 12; MCI Reply Comments at 13; Telecommunications Resellers Comments at 16. See also Competitive Carriers Comments at 19 (urging Commission to endorse certain improvements to interim measures).

³⁰³ See, e.g., Ad Hoc Telecommunications Users Committee Reply Comments at 5; NCTA Comments at 12-13; GSA Reply Comments at 6.

³⁰⁴ See, e.g., Ameritech Further Comments at 6-7 (Act confirms appropriateness of RCF and DID as interim methods); Bell Atlantic Further Reply Comments at 6-7 (asserting that section 252 and interconnection agreements sufficiently guarantee provision of interim measures); NYNEX Comments at 7; USTA Further Comments at 2.

³⁰⁵ See, e.g., Ameritech Comments at 5; Bell Atlantic Comments at 19-20; BellSouth Comments at 46-47. But see GTE Further Comments at 8 (short time frame for implementation mandated by Act compels Commission to impose temporary instead of permanent method).

³⁰⁶ CPC is a database number portability method originally proposed by MCI, DSC Communications, Nortel, Tandem Computers, and Siemens Stromberg-Carlson. See supra ¶ 14, 23.

³⁰⁷ AT&T Comments at 31-32 (CPC is compatible with LRN, supports an N-1 call processing scenario, avoids routing calls through incumbent LEC networks, permits carriers to own or provide for their own routing databases, and supports vertical features); MCI Comments at 10-14. See also ACTA Reply Comments at 9, 12

NYNEX and SBC Communications claim that adopting CPC as an interim solution would result in wasted and duplicative efforts. They note that CPC fails to support certain services, such as ISDN calls, pay phone calls, and CLASS features when customers place a call into an NXX from which a number has been transferred to a different service provider, and that CPC may prevent an operator from identifying the switch serving a "ported" number, thereby interfering with busy line verification of that line.³⁰⁹

107. Potential new entrants into the local exchange market generally contend that requiring interim number portability is consistent with the 1996 Act.³¹⁰ Indeed, MFS maintains that the 1996 Act requires immediate implementation of interim measures until long-term portability is implemented.³¹¹ Teleport notes that the Bell Operating Companies, at least, are required to provide interim number portability as a condition of entry into the interLATA³¹² market.³¹³ MCI agrees that interim measures should be made available until long-term portability is implemented, and argues that section 4(i) of the Communications Act authorizes the Commission to perform any acts "necessary and proper" to execute section 251(b)(2), and that such authority is pre-existing and remains in effect.³¹⁴ ALTS contends that Congress clearly contemplated that the Commission should require interim measures until long-term portability is available because otherwise BOCs could satisfy the competitive checklist of section 271(c)(2)(B)(xi) for entry in

(CPC: (1) does not require development of switching systems; (2) does not impact billing systems; (3) can be implemented with minimum service/feature interaction; (4) can be rolled out on a regional basis; (5) does not affect LIDB, operator functions, or the format of the called-party number; and (6) can evolve into AT&T's LRN solution).

³⁰⁸ See generally AT&T February 6, 1996 Ex Parte Filing; MCI Ex Parte Letter, from Donald F. Evans, to Regina Keeney, FCC, CC Docket No. 95-116, filed Mar. 15, 1996 (MCI March 15, 1996 Ex Parte Letter).

³⁰⁹ NYNEX Reply Comments at 3, 6-7; SBC Reply Comments at 10, 11 n.17, 15.

³¹⁰ The Texas Advisory Commission urges the Commission to clarify that states may include public health and safety requirements, such as Automatic Location Information (ALI) retrieval of the directory number, for interim measures based on section 253(b). According to the Texas Advisory Commission, this section allows states to impose requirements to protect the public safety and welfare. Texas Advisory Commission Further Reply Comments at 3 (citing 47 U.S.C. § 253(b)).

³¹¹ MFS Further Comments at 1-4, 7-8.

³¹² For purposes of this proceeding, we define the terms "local access and transport area" or "LATA" and "interLATA service" as defined in 47 U.S.C. §§ 153(25) and 153(21), respectively.

³¹³ Teleport Further Comments at 2.

³¹⁴ MCI Further Comments at 8 & n.15; MCI Ex Parte Letter, from Leonard S. Sawicki, to Matthew Harthun, FCC, CC Docket No. 95-116, filed Mar. 29, 1996 (MCI March 29, 1996 Ex Parte Letter).

interLATA services without providing any form of number portability.³¹⁵ AT&T argues that interim arrangements are incapable of preserving the functionality for long-term number portability required by the 1996 Act, but should be provided until long-term number portability can be deployed.³¹⁶

108. US West, in contrast, asserts that the Commission's jurisdiction over interim measures is unclear because sections 153(30) and 251(b)(2), giving the Commission jurisdiction over number portability, appear to include only permanent portability.³¹⁷ Cox and NCTA claim that the interim measures do not satisfy the "without impairment of quality, reliability, or convenience" standard in the definition of number portability in 47 U.S.C. section 153(30).³¹⁸

109. Several of the cable interests argue that, although section 271(c)(2)(B)(xi) allows the BOCs initially to satisfy the competitive checklist for entry into interLATA services by providing only interim measures, the BOCs are also required to provide long-term portability to fulfill the checklist requirements. Moreover, Cox and Time Warner Holdings warn that the Commission will lose its leverage to encourage prompt implementation of long-term portability once the BOCs are permitted to provide in-region interLATA services pursuant to section 271.³¹⁹ NCTA asserts that, since section 271(c)(2)(B)(xi) distinguishes between "interim" measures and "regulations pursuant to section 251 to require number portability," the portability required by section 251 is long-term number portability.³²⁰ CCTA urges the Commission to review and require BOC progress toward deployment of a long-term method when BOCs apply for in-region interLATA market entry, and to deny a BOC application if the BOC tries to delay implementation of long-term portability.³²¹ Cox goes further and argues that, after the Commission adopts number portability rules, BOCs must implement long-term service provider portability, not just interim measures, before they can obtain interexchange and manufacturing relief under section 271 because interim measures do not satisfy section 251.³²² In response, Ameritech contends that provision of interim measures, and

³¹⁵ ALTS Further Comments at 4-5.

³¹⁶ AT&T Further Comments at 9, 10 & n.20.

³¹⁷ US West Further Reply Comments at 9 & n.10.

³¹⁸ Cox Further Comments at 6; NCTA Further Comments at 4.

³¹⁹ Cox Further Comments at 7; Time Warner Holdings Further Comments at 8 n.19.

³²⁰ NCTA Further Comments at 5 n.11.

³²¹ CCTA Further Comments at 3, 8-9.

³²² Cox Further Comments at 5-7.

later compliance with the Commission's portability rules, satisfies the BOC checklist and notes that section 271(d)(4) directs the Commission not to limit or extend the checklist terms.³²³

b. Discussion

110. The 1996 Act requires that carriers "provide, to the extent technically feasible, number portability in accordance with the requirements prescribed by the Commission."³²⁴ Number portability is defined in the 1996 Act as "the ability of users of telecommunications services to retain, at the same location, existing telecommunications numbers without impairment of quality, reliability, or convenience when switching from one telecommunications carrier to another."³²⁵ The record indicates that currently technically feasible methods of providing number portability, such as RCF and DID, may impair to some degree either the quality, reliability, or convenience of telecommunications services when customers switch between carriers.³²⁶ Because of these drawbacks, some may argue that the use of RCF and DID methods for providing number portability would not satisfy the requirements of sections 3(30) and 251(b)(2). We disagree. Section 251(b)(2) specifically requires carriers to provide number portability, as defined in section 3(30), "to the extent technically feasible." Thus, because currently RCF and DID are the only methods technically feasible, we believe that use of these methods, in fact, comports with the requirements of the statute. We believe that the 1996 Act contemplates a dynamic, not static, definition of technically feasible number portability methods. Under this view, LECs are required to offer number portability through RCF, DID, and other comparable methods because they are the only methods that currently are technically feasible. LECs are required by this Order to begin the deployment of a long-term number portability solution by October 1, 1997, because, based on the evidence of record, such methods will be technically feasible by that date. We believe that this conclusion is consistent with Congress's goal of developing a national number portability framework, as well as the general purpose of the Act to "promote competition . . . in order to secure lower prices and higher quality services for American telecommunications consumers and encourage the rapid deployment of new technologies."³²⁷

³²³ Ameritech Further Reply Comments at 6. See also BellSouth Further Reply Comments at 2 n.5, 5; NYNEX Further Reply Comments at 6.

³²⁴ See 47 U.S.C. § 251(b)(2).

³²⁵ See 47 U.S.C. § 153(30).

³²⁶ See, e.g., AT&T Further Comments at 9; Cox Further Comments at 6; NCTA Further Comments at 4.

³²⁷ See 1996 Act, 110 Stat. 56 (statement of 1996 Act's purpose).

111. This interpretation finds further support in section 271(c)(2)(B)(xi), which sets forth the competitive checklist for BOC entry into in-region interLATA services. That section requires the BOCs wishing to enter the in-region interLATA market: (1) to provide interim number portability through RCF, DID, and other comparable arrangements "until the date by which the Commission issues regulations pursuant to section 251 to require number portability," and then (2) to comply with the Commission's regulations.³²⁸ There will necessarily be a significant time period between the adoption date of these rules and the availability of long-term number portability measures. Therefore, were the Commission to promulgate rules providing only for the provision of long-term number portability, during this time period the BOCs could satisfy the competitive checklist without providing any form of number portability. This could be true even if they had been providing interim number portability pursuant to the checklist prior to the effective date of the Commission's regulations. We do not believe that Congress could have intended this result. We, therefore, agree with MFS, ALTS, MCI, and AT&T that Congress intended that currently available number portability measures be provided until a long-term number portability method is technically feasible and available.

112. We conclude that we had authority to require the provision of currently available methods of service provider portability prior to passage of the 1996 Act. In the Notice, we tentatively concluded that sections 1 and 202 of the Communications Act establish a federal interest in the provision of number portability.³²⁹ Specifically, we concluded in the Notice that such interest arises from: (1) our obligation to promote an efficient and fair telecommunications system;³³⁰ (2) the inability to separate the impact of number portability between intrastate and interstate telecommunications;³³¹ (3) the potential adverse impact deploying different number portability solutions across the country would have on the provision of interstate telecommunications services;³³² and (4) the impact number portability could have on the use of the numbering resource,³³³ that is, ensuring that the use of numbers is efficient and does not contribute to area code exhaust. We now affirm these tentative conclusions and conclude that we have

³²⁸ See 47 U.S.C. § 271(c)(2)(B)(xi).

³²⁹ See Notice, 10 FCC Red at 12361-62 (citing 47 U.S.C. § 151 -- requiring the Commission to make available to all people of the United States "a rapid, efficient, nation-wide, and world-wide wire and radio communications service;" 47 U.S.C. § 202 -- requiring that the charges, practices, classifications, regulations, facilities, and services of common carriers not be unreasonably discriminatory; Proposed 708 Relief Plan and 630 Numbering Plan Area Code by Ameritech - Illinois, Declaratory Ruling and Order, 10 FCC Red 4596, 4601-02 (1995)).

³³⁰ Notice, 10 FCC Red at 12361-62.

³³¹ Id. at 12361 & n.34.

³³² Id. at 12362.

³³³ Id.

jurisdiction to require the provision of currently available number portability methods, independent of the statutory changes adopted in the 1996 Act.

113. There are also substantial policy reasons that support our requiring LECs to provide currently available number portability measures. The ability of customers to keep their telephone numbers when changing carriers, even with some impairment in call set-up time or vertical service offerings, is critical to opening the local marketplace to competition.³³⁴ By facilitating entry of new carriers into the local market, currently available number portability measures will increase competition in local markets which will result in lower prices and higher service quality for telecommunications services consistent with the goals of the 1996 Act. Several parties to this proceeding likewise advocate that such measures are necessary for the development of effective local exchange competition.³³⁵

114. We note that sections 251(b)(2) and 251(d) give to the Commission the authority to prescribe requirements for the provision of number portability. Pursuant to that authority, we mandate the provision of currently available number portability measures as soon as reasonably possible upon receipt of a specific request from another telecommunications carrier, including from wireless service providers.³³⁶ By conditioning the obligation to provide currently available number portability measures upon a specific request, number portability will be offered only in those areas where a competing local exchange carrier seeks to provide service. Thus, it avoids the imposition of number portability implementation costs on carriers (and end users) in areas where no competitor is operating.

115. We agree with the many parties who claim that the technical limitations described in the Notice that handicap all currently available measures for providing number portability render them unacceptable as long-term solutions. Despite Bell Atlantic's claims to the contrary for its own network,³³⁷ the record indicates that currently available number portability measures are inferior to LRN portability or any other method that meets our performance criteria. The 1996 Act, and particularly the BOC checklist in section 271, clearly contemplates that these methods should serve as only temporary measures until long-term number portability is implemented.³³⁸ As indicated above, the 1996 Act requires that number portability be provided, to the extent technically feasible,

³³⁴ See supra ¶¶ 29-32.

³³⁵ See, e.g., Cablevision Lightpath Reply Comments at 8-9; Jones Intercable Comments at 4.

³³⁶ See 47 U.S.C. § 251(b)(2), (d).

³³⁷ Bell Atlantic Comments at 5-7.

³³⁸ See, e.g., AT&T Further Comments at 9-10.

without impairment of quality, reliability, and convenience.³³⁹ Therefore, when a number portability method that better satisfies the requirements of section 251(b)(2) than currently available measures becomes technically feasible, LECs must provide number portability by means of such method. In addition, we find that the existing measures fail to satisfy our criteria set forth for any long-term solution; for example, they depend on the original service provider's network, may result in the degradation of service quality, and are wasteful of the numbering resource. For these reasons, we do not believe that long-term use of the currently available measures is in the public interest. We emphasize that we encourage all LECs to implement a long-term solution that meets our technical standards as soon as possible. We also note that BOCs must comply with the requirements set forth in this Order, including the requirement to provide currently available measures, in order to satisfy the BOC competitive checklist.³⁴⁰ Upon the date on which long-term portability must be implemented according to our deployment schedule, BOCs must provide long-term number portability and will be subject to an enforcement action under section 271(d)(6) if they fail to do so.³⁴¹

116. We decline to require a "medium-term" or short-term database solution such as CPC. The increased costs of implementing this approach are unwarranted given the imminent implementation of a long-term solution that meets our criteria. In addition, devoting resources to implement a medium-term database solution, which is currently not available, may delay implementation of a long-term database solution.³⁴² We note that the Colorado, Georgia, Illinois, and Ohio state commissions have declined to adopt, and the California and Maryland task forces have declined to recommend, CPC as an interim solution,³⁴³ while the emphasis on New York's CPC trial has shifted in favor of concentrating on the adoption of LRN.³⁴⁴ We also note that several parties originally advocating CPC have since retreated from that view and now instead support implementing a long-term database solution as soon as possible.³⁴⁵ To the extent carriers

³³⁹ See 47 U.S.C. §§ 153(30), 251(b)(2).

³⁴⁰ See 47 U.S.C. § 271(c)(2)(B)(xi).

³⁴¹ 47 U.S.C. § 271(d)(6) (allowing Commission, among other sanctions, to suspend or revoke approval of BOC application to provide interLATA services).

³⁴² See Time Warner Holdings Comments at 13 & n.16 (implementation of CPC would take approximately six months).

³⁴³ See CA LNP Task Force Report at 44-46; CO PUC LNP Order; CO PUC Proposed Rules Regarding Local Number Portability, Decision Adopting Rules, Docket No. 95R-554T, at attachment A at 4 (adopted Feb. 7, 1996); ICC LNP Order; GA PSC Portability Order at 6; MD PSC Report; Ohio PUC Competition Order at section XIV.

³⁴⁴ NY DPS Portability Trial Report at 6-7.

³⁴⁵ Time Warner Holdings February 12, 1996 Ex Parte Filing; AT&T February 28, 1996 Ex Parte Filing.

wish to provide a medium-term database solution, such as CPC, however, we do not prevent them from doing so.

3. Cost Recovery for Currently Available Number Portability Measures

a. Positions of the Parties

117. In comments filed before passage of the 1996 Act, Cablevision Lightpath argues that all carriers should pay incremental, cost-based rates for interim measures and suggests, as an example, an annual surcharge based on the product of the incremental cost of switching and minutes of traffic forwarded.³⁴⁶ AT&T and MCI agree with Cablevision Lightpath and endorse the formula used by the New York Department of Public Service, which allocates the costs of providing interim measures across all carriers based on the product of switching and transport costs, and minutes of forwarded traffic.³⁴⁷ Cablevision Lightpath urges, however, the Commission to ban incumbent LECs from treating the costs of currently available number portability as exogenous adjustments to their interstate price cap indices.³⁴⁸ GSA, Jones Intercable, and the Users Committee point out that the short-term incremental costs of providing interim measures are low.³⁴⁹

118. Many of the new entrants advocate placing much of the burden of cost-recovery for interim measures on the incumbent LECs. Jones Intercable, along with several other cable interests, argues that the incumbent LECs and new LECs should recover the costs of interim measures under a "bill and keep" system, under which incumbent LECs and new entrants would not charge each other for interim number portability arrangements that require them to forward calls of customers who have changed service providers.³⁵⁰ In the alternative, Jones Intercable contends that incumbent LECs' charges for interim number portability services should be equal to or less than the

³⁴⁶ Cablevision Lightpath Reply Comments at 11-13.

³⁴⁷ MCI March 29, 1996 Ex Parte Filing; AT&T Further Reply Comments at 8 n.30; MCI March 15, 1996 Ex Parte Filing; MCI Further Reply Comments at 9-10.

³⁴⁸ Cablevision Lightpath Reply Comments at 13.

³⁴⁹ GSA Reply Comments at 5; Jones Intercable Comments at 5; Users Committee Comments at 4.

³⁵⁰ See, e.g., Jones Intercable Comments at 5; Jones Intercable Reply Comments at 11-12; NCTA Comments at 13; Time Warner Holdings Comments at 21-22. See also Competitive Carriers Comments at 12.

LECs' incremental cost of providing those services.³⁵¹ Teleport also supports the provision of interim portability measures with no intercarrier usage charges.³⁵²

119. Several commenters propose large discounts comparable to those mandated for non-equal access during the transition to equal access.³⁵³ Competitive Carriers assert that allowing LECs to charge retail prices would discourage provision of long-term number portability.³⁵⁴ MCI argues that portability is a network function, not a service, and proposes that all local carriers share the costs or at least that incumbent LECs not be allowed to recover more than the incremental costs.³⁵⁵ AT&T and MFS argue that any interim measures should be provided at rates that encourage incumbents to offer the most efficient routing available, or reflect these measures' inferior quality and true costs.³⁵⁶ ALTS and MFS further argue that competitive local exchange carriers should be entitled to retain all terminating access charges.³⁵⁷ Similarly, MCI and NCTA argue that the terminating access charges paid by IXCs should be shared with the competitor that actually completes calls forwarded to it.³⁵⁸

120. AT&T and MCI argue that the 1996 Act requires that the costs of providing interim number portability measures be borne by all telecommunications carriers on a competitively neutral basis.³⁵⁹ MFS argues that interim measures should be provided at no cost or in the alternative, allocated on revenues net of payments to intermediaries.³⁶⁰ Several LECs, in contrast, claim that the competitively neutral standard prohibits requiring incumbent LECs to subsidize their competitors by providing interim

³⁵¹ Jones Intercable Reply Comments at 12.

³⁵² Teleport Comments at 15-16; Teleport Reply Comments at 16. See also MFS Further Comments at 8.

³⁵³ Competitive Carriers Comments at 12. See also General Communication Reply Comments at 5; Time Warner Holdings Comments at 21-22.

³⁵⁴ Competitive Carriers Comments at 20.

³⁵⁵ MCI Reply Comments at 14-16. MCI adds that state commissions must review the cost bases for the tariffs implementing RCF and DID. Id. at 16.

³⁵⁶ AT&T Comments at 15 n.21; MFS Further Reply Comments at 8-9.

³⁵⁷ ALTS Further Comments at 7; MFS Further Reply Comments at 9.

³⁵⁸ MCI Ex Parte Letter, from Donald F. Evans, to Regina Keeney, FCC, CC Docket No. 95-116, filed May 28, 1996 (MCI May 28, 1996 Ex Parte Letter); NCTA Comments at 13.

³⁵⁹ AT&T Further Comments at 10 & n.20; MCI Further Comments at 8.

³⁶⁰ MFS Further Reply Comments at 9.

measures for free or at deeply discounted rates.³⁶¹ Ameritech asserts that section 251(e)(2)'s "competitively neutral" standard for cost recovery does not apply to interim portability at all. It asserts that interim portability is addressed in section 271(c)(2)(B)(xi), and therefore the Commission is not authorized under the BOC checklist to eliminate or discount interim portability rates below levels that state commissions have already judged reasonable.³⁶² Similarly, BellSouth argues that Congress's endorsement of interim RCF and DID arrangements in the BOC checklist, and the 1996 Act's structure of requiring state-approved carrier negotiations for interconnection agreements, compel the conclusion that RCF and DID cost recovery issues be left to the states.³⁶³

b. Discussion

121. In light of our statutory mandate that local exchange carriers provide number portability through RCF, DID, or other comparable arrangements until a long-term number portability approach is implemented, we must adopt cost recovery principles for currently available number portability that satisfy the 1996 Act. We emphasize that the cost recovery principles set forth below will apply only until a long-term number portability method can be deployed. As we have indicated, deployment of long-term number portability should begin no later than October 1997, so currently available number portability arrangements, and the associated cost recovery mechanism, should be in place for a relatively short period.

122. It is also important to recognize that the costs of currently available number portability are incurred in a substantially different fashion than the costs of long-term number portability arrangements. First, the capability to provide number portability through currently available methods, such as RCF and DID, already exists in most of today's networks, and no additional network upgrades are necessary. In contrast, long-term, or database, number portability methods require significant network upgrades, including installation of number portability-specific switch software, implementation of SS7 and IN or AIN capability, and the construction of multiple number portability databases. Second, the costs of providing number portability in the immediate term are incurred solely by the carrier providing the forwarding service. Long-term number portability, in contrast, will require all carriers to incur costs associated with the installation of number portability-specific software and the construction of the number portability databases. Those costs will have to be apportioned in some fashion among all carriers. Finally, we note that, initially, the costs of providing currently available

³⁶¹ See, e.g., Bell Atlantic Further Reply Comments at 7; GTE Further Reply Comments at 6-7; Pacific Bell Further Reply Comments at 8 n.16.

³⁶² Ameritech Further Reply Comments at 8.

³⁶³ BellSouth Further Reply Comments at 8.

number portability will be incurred primarily by the incumbent LEC network because most customers will be forwarding numbers from the incumbents to the new entrants.

123. Parties have advanced a wide range of methods for recovering the costs of currently available number portability measures, including arrangements whereby neither carrier charges the other for provision of such measures and incremental, cost-based pricing schemes. In addition, several states have adopted different cost recovery mechanisms. For example, in Florida, carriers have negotiated appropriate rates for currently available measures. The Louisiana PSC has adopted a two-tiered approach to pricing of currently available measures. In the first instance, carriers are permitted to negotiate an appropriate rate. If the parties cannot agree upon a rate, the PSC will determine the appropriate rate that can be charged by the forwarding carrier based on cost studies filed by the carriers. These rates are not required to be set at long-run incremental costs (LRIC) or total service long-run incremental costs (TSLRIC), however.³⁶⁴

124. In addition, incumbents and new entrants have voluntarily negotiated a variety of cost recovery methods. Carriers in Rochester, New York, for example, are voluntarily using a formula that allocates the incremental costs of currently available number portability measures, through an annual surcharge assessed by the carrier from which the number is transferred. The charge assessed on each carrier is the product of the total number of forwarded minutes and the incremental per-minute costs of switching and transport, multiplied by the ratio of a particular carrier's forwarded telephone numbers relative to total working numbers in the area. In addition, Rochester Telephone has agreed not to charge competitors for the first \$1 million of the cost of number portability.³⁶⁵ The New York DPS has adopted this formula for the New York Metropolitan area as well.³⁶⁶ Ameritech and MFS recently entered into an agreement for Ameritech's five-state region under which MFS will pay Ameritech \$3 per line per month for interim measures. MFS plans to seek regulatory approval to allocate that cost under a formula that would require MFS to pay a portion of the \$3 charge equal to the ratio of MFS's gross telecommunications service revenues, net of its payments to other carriers, to Ameritech's gross telecommunications revenues, net of payments to other carriers.³⁶⁷

³⁶⁴ Louisiana PSC Regulations for Competition in the Local Telecommunications Market, General Order, Docket No. U-20883, at section 801, Part D (Mar. 15, 1996).

³⁶⁵ NYNEX Ex Parte Filing, CC Docket No. 95-116, filed Mar. 22, 1996 (NYNEX March 22, 1996 Ex Parte Filing).

³⁶⁶ NY PSC Order Clarifying March 8, 1995 Number Portability Order, Case No. 94-C-0095, at 3-4 & n.1 (issued and effective Mar. 8, 1995), submitted in NARUC April 17 Ex Parte Filing at vol. 1-A at 32.

³⁶⁷ Interconnection Agreement under Sections 251 and 252 of the Telecommunications Act of 1996, dated as of May 17, 1996, by and between Ameritech Information Industry Services, a division of Ameritech Services, Inc. on behalf of Ameritech Illinois and MFS Intelenet of Illinois, Inc.; MFS White Paper Number

125. Our cost recovery principles for currently available methods, of course, must comply with the statutory requirements of the 1996 Act. In addition, consistent with the pro-competitive objectives of the 1996 Act, we seek to create incentives for LECs, both incumbents and new entrants, to implement long-term number portability at the earliest possible date, since, as we have noted, long-term number portability is clearly preferable to existing number portability methods. The principles we adopt should also mitigate any anti-competitive effects that may arise if a carrier falsely inflates the cost of currently available number portability.

126. In our interconnection proceeding, we have sought comment on our tentative conclusion that the 1996 Act authorizes us to set pricing principles to ensure that rates for interconnection, unbundled network elements, and collocation are just, reasonable, and nondiscriminatory.³⁶⁸ We need not, however, reach in this proceeding the issue of whether section 251 generally gives us authority over pricing for interconnection because the statute sets forth the standard for the recovery of number portability costs and grants the Commission the express authority to implement this standard. Specifically, section 251(e)(2) requires that the costs of "number portability be borne by all telecommunications carriers on a competitively neutral basis as determined by the Commission."³⁶⁹ We therefore conclude that section 251(e)(2) gives us specific authority to prescribe pricing principles that ensure that the costs of number portability are allocated on a "competitively neutral" basis.

127. In exercising our authority under section 251(e)(2), we conclude that we should adopt guidelines that the states must follow in mandating cost recovery mechanisms for currently available number portability methods. To date, the state commissions have adopted different cost recovery methods. We seek to articulate general criteria that conform to the statutory requirements, but give the states some flexibility during this interim period to continue using a variety of approaches that are consistent with the statutory mandate. The states are also free, if they so choose, to require that tariffs for the provision of currently available number portability measures be filed by the carriers.

128. In establishing the standard for number portability cost recovery, section 251(e)(2) sets forth three specific elements, which we must interpret. First, we must determine the meaning of number portability "costs;" second, we must interpret the phrase "all telecommunications carriers;" and third, we must construe the meaning of the phrase "competitively neutral."

Portability Requirements of the Telecommunications Act of 1996, April 30, 1996 (MFS White Paper, 1996).

³⁶⁸ Interconnection NPRM at ¶ 117.

³⁶⁹ See 47 U.S.C. § 251(e)(2).

129. The costs of currently available number portability are the incremental costs incurred by a LEC to transfer numbers initially and subsequently forward calls to new service providers using existing RCF, DID, or other comparable measures. According to the record, the costs of RCF differ depending on where the call originates in a carrier's network. Calls that originate on the switch from which a number has been forwarded (intraoffice calls) result in fewer costs than calls that originate from other switches (interoffice calls). This is because fewer transport and switching costs are incurred in the forwarding of an intraoffice call. The BOCs claim, for example, that there are essentially three costs incurred in the provision of RCF for an intraoffice call: (1) switching costs incurred by the original switch in determining that the number is no longer resident; (2) switching costs incurred in performing the RCF translation, which identifies the address of the receiving switch; and (3) switching costs incurred in redirecting the call from the original switch to the switch to which the number has been forwarded.³⁷⁰ The BOCs further assert that the additional costs incurred for an interoffice call include: (1) the transport costs incurred in directing the call from the tandem or end office to the office from which the number was transferred and back to the tandem or end office; and (2) remote tandem or end office switching costs.³⁷¹ There is conflicting evidence in the record on whether these costs are incurred on a per-minute, per-call, or some fixed basis.³⁷² State commissions in some states have set cost-based rates for currently available number portability measures. In order to do so, states have used different methods of identifying costs, including LRIC, TSLRIC, and direct embedded cost studies. In California and Illinois, the state commissions set cost-based fixed monthly rates for RCF, while in New York and Maryland, the commissions set cost-based rates for minutes of use.³⁷³ In addition, there is some evidence in the record that carriers incur some non-recurring costs in the provision of currently available methods of number portability.³⁷⁴ Several states, such as California, Illinois, and Maryland, have

³⁷⁰ Ameritech Ex Parte Filing at 2, CC Docket No. 95-116, filed Feb. 20, 1996 (Ameritech February 20, 1996 Ex Parte Filing); Bell Atlantic Ex Parte Filing at 1 & 3, CC Docket No. 95-116, filed June 19, 1996 (Bell Atlantic June 19, 1996 Ex Parte Filing); BellSouth Ex Parte Filing, CC Docket No. 95-116, filed Mar. 21, 1996 (BellSouth March 21, 1996 Ex Parte Filing).

³⁷¹ Ameritech February 20, 1996 Ex Parte Filing at 2.

³⁷² See Ameritech Ex Parte Filing at 2-3, CC Docket No. 95-116, filed Mar. 26, 1996 (Ameritech March 26, 1996 Ex Parte Filing); NYNEX March 22, 1996 Ex Parte Filing.

³⁷³ Bell Atlantic March 22, 1996 Ex Parte Filing at 2; NYNEX March 22, 1996 Ex Parte Filing at 1-2.

³⁷⁴ See Ameritech March 26, 1996 Ex Parte Filing at 2; BellSouth March 21, 1996 Ex Parte Filing at 2; US West Ex Parte Filing at 6, CC Docket No. 95-116, filed June 19, 1996 (US West June 19, 1996 Ex Parte Filing).

permitted the carrier forwarding a number to recover such non-recurring costs as a one-time, non-recurring charge.³⁷⁵

130. Section 251(e)(2) of the Communications Act requires that the costs of providing number portability be borne by "all telecommunications carriers."³⁷⁶ No party commented on the meaning of the term "all telecommunications carriers." Read literally, the statutory language "all telecommunications carriers" would appear to include any provider of telecommunications services. Section 3 of the Communications Act defines telecommunications services to mean "the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of facilities used."³⁷⁷ Under this reading, states may require all telecommunications carriers -- including incumbent LECs, new LECs, CMRS providers, and IXCs -- to share the costs incurred in the provision of currently available number portability arrangements. As discussed in greater detail below, states may apportion the incremental costs of currently available measures among relevant carriers by using competitively neutral allocators, such as gross telecommunications revenues, number of lines, or number of active telephone numbers.

131. Section 251(e)(2) of the Act states that the costs of number portability are to be "borne by all telecommunications carriers on a competitively neutral basis as determined by the Commission." We interpret "on a competitively neutral basis" to mean that the cost of number portability borne by each carrier does not affect significantly any carrier's ability to compete with other carriers for customers in the marketplace. Congress mandated the use of number portability so that customers could change carriers with as little difficulty as possible. Our interpretation of "borne . . . on a competitively neutral basis" reflects the belief that Congress's intent should not be thwarted by a cost recovery mechanism that makes it economically infeasible for some carriers to utilize number portability when competing for customers served by other carriers. Ordinarily the Commission follows cost causation principles, under which the purchaser of a service would be required to pay at least the incremental cost incurred in providing that service. With respect to number portability, Congress has directed that we depart from cost causation principles if necessary in order to adopt a "competitively neutral" standard, because number portability is a network function that is required for a carrier to compete with the carrier that is already serving a customer. Depending on the technology used, to price number portability on a cost causative basis could defeat the purpose for which it was mandated. We emphasize, however, that this statutory mandate

³⁷⁵ AT&T Ex Parte Presentation at 1, CC Docket No. 95-116 filed Mar. 13, 1996 (AT&T March 13, 1996, Ex Parte Filing).

³⁷⁶ 47 U.S.C. § 251(e)(2).

³⁷⁷ 47 U.S.C. § 153(44), (46).

constitutes a rare exception to the general principle, long recognized by the Commission, that the cost-causer should pay for the costs that he or she incurs.

132. Our interpretation suggests that a "competitively neutral" cost recovery mechanism should satisfy the following two criteria. First, a "competitively neutral" cost recovery mechanism should not give one service provider an appreciable, incremental cost advantage over another service provider, when competing for a specific subscriber. In other words, the recovery mechanism should not have a disparate effect on the incremental costs of competing carriers seeking to serve the same customer. The cost of number portability borne by a facilities-based new entrant that wins a customer away from an incumbent LEC is the payment that the new entrant must make to the incumbent LEC. The higher this payment, the higher the price the new entrant must charge to a customer to serve that customer profitably, which will put the new entrant at a competitive disadvantage.³⁷⁸ We thus interpret our first criterion as meaning that the incremental payment made by a new entrant for winning a customer that ports his number cannot put the new entrant at an appreciable cost disadvantage relative to any other carrier that could serve that customer.

133. An example illustrates the application of this criteria. When a facilities-based carrier that competes against an incumbent LEC for a customer, the incumbent LEC incurs no cost of number portability if it retains the customer. If the facilities-based carrier wins the customer, an incremental cost of number portability is generated. The share of this incremental cost borne by the new entrant that wins the customer cannot be so high as to put it at an appreciable cost disadvantage relative to the cost the incumbent LEC would incur if it retained the customer. Thus, the incremental payment by the new entrant if it wins a customer would have to be close to zero, to approximate the incremental number portability cost borne by the incumbent LEC if it retains the customer.³⁷⁹

³⁷⁸ We recognize that the incumbent LEC and new entrant, when competing for a customer, will take into account not only the incremental cost of winning the customer, but also the incremental cost of losing a customer. The cost to an incumbent LEC of losing a customer who ports his or her number to a new entrant is the incremental cost of porting that number to the new entrant, less any payments made by the new entrant to the incumbent LEC. In theory, the higher the incremental costs of losing customers, the greater the incentive an incumbent LEC would have to offer a customer a low price to prevent a customer from porting his or her number, which would allow the incumbent LEC to avoid the number portability cost. For the interim period, however, we expect that the number of customers that will port their number will be small relative to the total number of customers an incumbent LEC serves. Since incumbent LECs offer local service on a tariffed basis to all customers, the incentive for an incumbent LEC to lower its price to all customers in order to avoid the cost of porting a small number of numbers will be small enough to be inconsequential in determining the incumbent LEC's price.

³⁷⁹ Carriers taking unbundled elements or reselling services do not generate a cost of number portability. Thus, a low incremental payment by a facilities-based carrier is necessary in order not to disadvantage it relative to such resellers.

134. A couple of additional examples may further clarify and illustrate this criterion. On the one hand, a cost recovery mechanism that imposes the entire incremental cost of currently available number portability on a facilities-based new entrant would violate this criterion. This cost recovery mechanism would impose an incremental cost on a facilities-based entrant that neither the incumbent, nor an entrant that merely resold the incumbent's service, would have to bear, because neither the incumbent nor the reseller would have to use currently available number portability measures in order for the prospective customer to keep his or her existing number. On the other hand, a cost recovery mechanism that recovers the cost of currently available number portability through a uniform assessment on the revenues of all telecommunications carriers, less any charges paid to other carriers, would satisfy this criterion.³⁸⁰ This approach does not disparately affect the incremental cost of winning a specific customer or group of customers, because a LEC with a small share of the market's revenue would pay a percentage of the incremental cost of number portability that will be small enough to have no appreciable affect on the new entrant's ability to compete for that customer.

135. The second criterion for a "competitively neutral" cost recovery mechanism is that it should not have a disparate effect on the ability of competing service providers to earn normal returns on their investment. If, for example, the total costs of currently available number portability are to be divided equally among four competing local exchange carriers, including both the incumbent LEC and three new entrants, within a specific service area, the new entrant's share of the cost may be so large, relative to its expected profits, that the entrant would decide not to enter the market. In contrast, recovering the costs of currently available number portability from all carriers based on each local exchange carrier's relative number of active telephone numbers would not violate this criterion, since the amount to be recovered from each carrier would increase with the carrier's size, measured in terms of active telephone numbers or some other measure of carrier size. In addition, allocating currently available number portability costs based on active telephone numbers results in approximately equal per-customer costs to each carrier. We also believe that assessing costs on a per-telephone number basis should give no carrier an advantage, relative to its competitors. An alternative mechanism that would also satisfy our competitive neutrality requirement would be to recover currently available number portability costs from all carriers, including local exchange, interexchange, and CMRS carriers, based on their relative number of presubscribed customers.

³⁸⁰ If a state adopts this cost recovery mechanism, we require that a state's calculation of gross revenues for IXCs should include only those revenues generated in the state in which the charges are being assessed, on both an interstate and intrastate basis. This ensures that a carrier's bill reflects the level of its activities in a particular state and will prevent a carrier's being charged several times on the same revenues. Cf. Assessment and Collection of Regulatory Fees for Fiscal Year 1995, Price Cap Treatment of Regulatory Fees Imposed by Section 9 of the Act, Report and Order, 10 FCC Rcd 13512, 13558-59 (1995) (adopting gross revenues less carrier charges for recovering regulatory fees).

136. We conclude that a variety of approaches currently in use today essentially comply with our competitive neutrality criteria. One example is the formula voluntarily being used by carriers in Rochester, NY, and adopted by the NY DPS in the New York metropolitan area.³⁸¹ Specifically, this mechanism allocates the incremental costs of currently available number portability measures, through an annual surcharge assessed by the incumbent LEC from which the number is transferred. This surcharge is based on each carrier's number of ported telephone numbers relative to the total number of active telephone numbers in the local service area.³⁸² Similarly, as noted above, a cost recovery mechanism that allocates number portability costs based on a carrier's number of active telephone numbers (or lines) relative to the total number of active telephone numbers (or lines) in a service area would also satisfy the two criteria for competitive neutrality. As noted above, MFS in Illinois plans to seek regulatory approval for a similar formula that would allocate the costs of currently available measures between it and Ameritech based on each carrier's gross telecommunications revenues net of charges to other carriers.³⁸³ A third competitively neutral cost recovery mechanism would be to assess a uniform percentage assessment on a carrier's gross revenues less charges paid to other carriers.³⁸⁴ Finally, we believe that a mechanism that requires each carrier to pay for its own costs of currently available number portability measures would also be permissible.

137. The cost recovery mechanisms described in the preceding paragraphs define payments made by new entrants to incumbent LECs for providing number portability. We recognize that incumbent LECs must make payments to new entrants if the incumbent LEC wins a customer of the new entrant that wants to port its number. To be competitively neutral, the incumbent LEC would have a reciprocal compensation arrangement with each new entrant. That is, the incumbent LEC would pay to the new

³⁸¹ NYNEX March 22, 1996 Ex Parte Filing.

³⁸² The formula as filed in the NYNEX tariff is:

$$\frac{\text{Total Ported Minutes} * (\text{Switching} + \text{Transport Costs})}{\text{Total Working Telephone Numbers (TNs) Provided by the Telephone Company}} = \text{Charge per Working TN}$$

$$\text{Charge per Working TN} * \text{Number of Ported TNs Used by the CLEC} = \text{Charge per CLEC}$$

NYNEX March 22, 1996 Ex Parte Filing.

³⁸³ The formula proposed by MFS is:

$$\text{\$3 (Incremental Costs of Number Portability in Illinois)} * \text{Market share based on gross telecommunications revenues net of payments to other carriers.}$$

MFS White Paper, 1996 at 6, 12.

³⁸⁴ Cf. Assessment and Collection of Regulatory Fees for Fiscal Year 1995, Price Cap Treatment of Regulatory Fees Imposed by Section 9 of the Act, Report and Order, 10 FCC Rcd 13512, 13558-59 (1995) (adopting gross revenues less carrier charges for recovering regulatory fees).

entrant a rate for number portability that was equal to the rate that the new entrant pays the incumbent LEC.

138. In contrast, requiring the new entrants to bear all of the costs, measured on the basis of incremental costs of currently available number portability methods, would not comply with the statutory requirements of section 251(e)(2). Imposing the full incremental cost of number portability solely on new entrants would contravene the statutory mandate that all carriers share the cost of number portability. Moreover, as discussed above, incremental cost-based charges would not meet the first criterion for "competitive neutrality" because a new facilities-based carrier would be placed at an appreciable, incremental cost disadvantage relative to another service provider, when competing for the same customer. Rates for interim number portability would also not meet the second criterion if they approximate the retail price of local service. New entrants may effectively be precluded from entering the local exchange market if they are required to bear all the costs of currently available number portability measures.³⁸⁵ Retail rates for call forwarding, to the extent they are set above incremental costs, would also not meet the principles of competitive neutrality for the same reasons that incremental cost-based rates would not. Finally, placing the full cost burden of number portability on new entrants would also deter customers of incumbent carriers from transferring to a new service provider to the extent that the entrant passes on the cost of currently available number portability, in the form of higher prices for customers. In addition, if incumbent LECs were not required to bear a portion of the incremental costs of currently available number portability measures, they would have an incentive to delay implementation of a long-term number portability method.

139. A carrier has a number of options for seeking relief if it believes that the pricing provisions for number portability offered by a LEC violate the statutory standard in section 251(e)(2), the rules we set forth in this order, or state-mandated cost recovery mechanisms. First, it may bring action against the carrier in federal district court pursuant to section 207 for damages or file a section 208 complaint against another carrier alleging a violation of the Act or the Commission's rules.³⁸⁶ Alternatively, the carrier may file a request for declaratory ruling with the Commission, seeking our view on whether the statute and our rules have been properly applied.³⁸⁷ Finally, carriers in many instances will be able to pursue existing avenues before their state commission if a dispute arises regarding recovery of currently available number portability costs.

³⁸⁵ See NYNEX March 22, 1996 Ex Parte Filing. NYNEX reports switching and transport costs of interim number portability of \$0.01 per minute, and charges of \$0.106 for a five minute local call during business hours, the period with the highest rates. The charge of \$0.106 results from retail charges of \$0.08 for the first three minutes and \$0.013 per additional minute, as determined from its local tariffs on file with the NY PSC.

³⁸⁶ See 47 U.S.C. § 252(e)(6).

³⁸⁷ We will be initiating a proceeding to adopt expedited procedures regarding such complaints.

140. Finally, in response to questions concerning the appropriate treatment of terminating access charges in the interim number portability context, we conclude that the meet-point billing arrangements between neighboring incumbent LECs provide the appropriate model for the proper access billing arrangement for interim number portability. We decline to require that all of the terminating interstate access charges paid by IXCs on calls forwarded as a result of RCF or other comparable number portability measures be paid to the competing local service provider. On the other hand, we believe that to permit incumbent LECs to retain all terminating access charges would be equally inappropriate. Neither the forwarding carrier, nor the terminating carrier, provides all the facilities when a call is ported to the other carrier. Therefore, we direct forwarding carriers and terminating carriers to assess on IXCs charges for terminating access through meet-point billing arrangements. The overarching principle is that the carriers are to share in the access revenues received for a ported call. It is up to the carriers whether they each issue a bill for access on a ported call, or whether one of them issues a bill to the IXCs covering all of the transferred calls and shares the correct portion of the revenues with the other carriers involved. If the terminating carrier is unable to identify the particular IXC carrying a forwarded call for purposes of assessing access charges, the forwarding carrier shall provide the terminating carrier with the necessary information to permit the terminating carrier to issue a bill. This may include sharing percentage interstate usage (PIU) data and may require the terminating entity to issue a bill based on allocated interstate minutes per IXC as derived from data provided by the forwarding carrier.

G. Number Portability by CMRS Providers

1. Background

141. In our Notice, we sought comment and other information on the competitive significance of service provider portability for the development of competition between CMRS and wireline service providers.³⁸⁸ We also sought comment on the current, and estimated future, demand of commercial mobile radio service customers for portable wireless telephone numbers when they change their service provider either to another CMRS provider or to a wireline service provider.³⁸⁹ Finally, we sought comment on whether the burdens of implementing service provider portability (1) between CMRS carriers, and (2) between CMRS and wireline carriers are similar to the burdens of implementing service provider portability between wireline carriers.³⁹⁰

³⁸⁸ Notice, 10 FCC Rcd at 12359-60.

³⁸⁹ Id.

³⁹⁰ Id. at 12371.

2. Position of the Parties

142. Parties commenting on CMRS issues generally fall into three groups. One group consists of the providers of Personal Communications Services (PCS). The PCS providers are just beginning to build advanced wireless networks to enter the market. Their successful market entry depends largely upon convincing consumers of other commercial mobile radio services, e.g., cellular, to switch to PCS. The PCS providers therefore want number portability to be implemented as soon as technically possible. A second group is composed primarily of cellular providers, along with paging and messaging service providers. Parties in this category are generally incumbent service providers with relatively less sophisticated systems. These parties generally claim that number portability is unnecessary in the CMRS marketplace and oppose being required to upgrade their networks for such capabilities at allegedly great expense. A third group includes parties, such as Ameritech and AT&T Wireless, that support implementation of number portability by CMRS providers, but on a later deployment schedule than wireline portability so as to allow time for technical issues specific to CMRS to be resolved.³⁹¹

143. Authority to Require CMRS Providers To Provide Number Portability. SBC Communications argues that CMRS providers have no obligation to provide number portability under the 1996 Act, since the 1996 Act's imposes that duty only on LECs, and the definition of LEC specifically excludes CMRS providers. As a result, SBC Communications claims, the Commission should examine CMRS portability separately from wireline portability.³⁹² Similarly, Bell Atlantic NYNEX Mobile, Arch/AirTouch Paging, and MobileMedia argue that the 1996 Act and its legislative history demonstrate that the number portability obligation of section 251(b)(2) was not intended to apply to CMRS providers.³⁹³ BellSouth further argues that CMRS providers should not be required to offer portability until they compete directly with a LEC.³⁹⁴ Moreover, Bell Atlantic NYNEX Mobile asserts that section 332 of the Communications Act only

³⁹¹ See Ameritech May 15, 1996 Ex Parte Presentation at 14 (noting that wireless industry participation in Illinois Commerce Commission number portability workshop is not scheduled to begin until July 1996); AT&T Wireless Services, Inc. Ex Parte Presentation at 11, CC Docket No. 95-116, filed May 24, 1996 (AT&T Wireless May 24, 1996 Ex Parte Filing).

³⁹² SBC Communications Further Comments at 3.

³⁹³ Arch/AirTouch Paging Further Comments at 3-4 & n.8; Bell Atlantic NYNEX Mobile Further Comments at 2; MobileMedia Further Comments at 3-5 (arguing that original House and Senate proposals (H.R. Rep. No. 204, 104th Cong., 1st Sess. 71-72 (1995); S. Rep. No. 23, 104th Cong., 1st Sess. 19-20 (1995)) specified that focus of section 251(b)(2) was to develop competition in local exchange market, not any other competitive markets).

³⁹⁴ BellSouth Further Comments at 6; see also US West Further Reply Comments at 9-10.

subjects CMRS providers to limited regulation, where there is a "clear cut need" for doing so.³⁹⁵

144. Importance of Number Portability to CMRS Providers. Most PCS providers maintain that number portability is important in the CMRS industry because it will promote competition between different types of CMRS providers.³⁹⁶ PCIA supports long-term number portability solutions for broadband PCS systems when they are technically feasible, and urges the Commission to set a consistent long-term nationwide policy for number portability.³⁹⁷ Omnipoint, a winner of several licenses in the broadband PCS C Block auction, explains that the success of PCS entry depends on whether PCS providers can attract a significant share of embedded cellular customers.³⁹⁸

145. PCIA maintains that number portability is of considerable competitive importance to the broadband CMRS market because the advantages of portability will be a significant factor in consumers' decisions to change providers even though they must endure the inconvenience of changing equipment to do so.³⁹⁹ PCS Primeco claims that arguments made by incumbent cellular companies that downplay the importance of CMRS number portability are based on the fact that current cellular subscribers usually do not make their numbers widely known because, under existing cellular pricing plans, subscribers typically pay for both inbound and outbound calls. PCS Primeco contends that, since cellular and other CMRS customers do not distribute their numbers widely, such customers currently may not regard number portability as an important factor in deciding whether to switch CMRS providers. PCS Primeco asserts that in the future, as CMRS providers compete to become a substitute for wireline service, they will not assess charges on inbound calls, and CMRS customers will assign the same importance to number portability as wireline subscribers do today.⁴⁰⁰ PCIA argues similarly that portability will facilitate the convergence of and competition between CMRS and wireline services, which will likely result in cellular customers publishing their telephone

³⁹⁵ Bell Atlantic NYNEX Mobile Further Comments at 3 n.3 (quoting Petition of the Connecticut Dep't of Pub. Util. Control to Retain Regulatory Control of the Rates of Wholesale Cellular Service Providers, Report and Order, 10 FCC Rcd 7025, 7031 (1995) (Petition of CT DPUC, Order), aff'd, Dep't of Pub. Util. Control v. FCC, 78 F.3d 842 (2d Cir. 1996)).

³⁹⁶ See, e.g., Omnipoint Comments at 3; Omnipoint Reply Comments at 12; PCIA Comments at 3-5.

³⁹⁷ PCIA Ex Parte Presentation, CC Docket No. 95-116, filed May 23, 1996 (PCIA May 23, 1996 Ex Parte Filing).

³⁹⁸ Omnipoint Comments at 3; Omnipoint Reply Comments at 9, 12 (urging implementation of service provider portability in 100 largest MSAs between October 1997 and October 1998). See also MCI Comments at 3-4.

³⁹⁹ PCIA Reply Comments at 12-14.

⁴⁰⁰ PCS Primeco Reply Comments at 1-2; see also Pacific Bell Comments at 8.